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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,648	11/21/2001	Brig Barnum Elliott	00-4051	3681

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EXAMINER
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PEREZ, ANGELICA

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/990,648	ELLIOTT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Angelica M. Perez	2684	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 5, 7-21 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Hendrickson (Hendrickson et al.; US Patent No.: 6,754,470 B2).

Regarding claim 1, Hendrickson teaches of a radio frequency power monitoring device (columns 4 and 10, lines 40-49 and 31-36, respectively; e.g., "receive/transmit power) comprising: a frequency selector configured to pass one or more radio frequency bands of a received radio frequency signal (column 14, lines 10-27 and figure 2, items 225, 250,255; where the different types of data comprise different frequencies; therefore, the system requires a frequency selector in order to select frequencies within the range of the communication required; e.g., voice, data or image); a power estimator

configured to estimate a power level of the received radio frequency signal (column 10, lines 31-36 and figure 12, item 220; where if the power level is measured it is necessary to have a power measurement device or estimator); a memory (figure 12, item 275); a processing unit configured to: receive the power level from the power estimator (column 10, lines 31-43; e.g., "processors"), store the power level in the memory (columns 7 and 10, lines 61-64 and 31-43; respectively), and construct a record comprising the power level and a unique identifier associated with the radio frequency power monitoring device (columns 7 and 8, lines 34-67 and 1-6; where SIM cards, telephone handsets, and PDA's have a unique identifier; and a network interface configured to transmit the record to a measurement collection server across a network (columns 7 and 8, lines 153-57 and 1-6; e.g., "data gathering software 110 tracks the usage and performance of individual usage activity...to collect certain data...routed through an intermediate server. See also, column 15, lines 32-39; e.g., "transmit and receive power").

Regarding claim 10, Hendrickson teaches of a method of archiving radio frequency (RF) power profiles (column 15, lines 5-50; e.g., "collect data to ascertain demographic profiles"), comprising: measuring an RF power level at an RF power monitoring device to obtain a measured RF power level (column 10, lines 31-43; e.g., "receive/transmit power") transmitting the measured RF power level and a unique identifier associated with the RF power monitoring device to a measurement archival server across a network (columns 7 and 8, lines 153-57 and 1-6; e.g., "data gathering software 110 tracks the usage and performance of individual usage activity...to collect certain data...routed through an intermediate server. See also, column 15, lines 32-39;

e.g., “transmit and receive power”. In addition, SIM cards, telephone handsets, and PDA’s comprise unique identifiers); and storing the measured RF power level and the unique identifier as a data record in the measurement archival server (column 15, lines 5-8; e.g., “...collected data stored in the database...”).

Regarding claim 15, Hendrickson teaches a data structure encoded on a computer readable medium (column 6, lines 32-36): comprising: first data comprising a unique identifier associated with a radio frequency (RF) power monitoring device interconnected with a network (column 7, lines 34-38; where mobile cellular units inherently comprise a unique identifier number); and second data comprising an RF power level measured at the RF power monitoring device (column 10, lines 31-43; where the parametric is a RF power level); and Regarding claim 19, Zipper in view of Hendrickson teaches all the limitations of claim 15. Hendrickson further teaches of a third data comprising a time stamp that indicates a time at which the RF power level was measured at the RF power monitoring device (column 4, lines 55-64; e.g., “performance metrics...time stamp data”).

Regarding claims 7, 12 and 17, Hendrickson teaches all the limitations of claims 1, 10 and 15, respectively. Hendrickson further teaches where the unique identifier comprises at least one of a device serial number, a device alphanumeric identifier and a network address (column 7, lines 34-38; where mobile cellular units inherently comprise a unique identifier number).

Regarding claims 5, 9, 11 and 16, Hendrickson teaches all the limitations of claims 1, 10 and 15. Hendrickson further teaches where the network comprises an IP network (figure 2, item 225; where “wireless internet data” comprises an “IP network”).

Regarding claims 8, 13 and 18, Hendrickson teaches all the limitations of claims 7, 12 and 17, respectively. Hendrickson further teaches where the network address comprises an IP address (figure 2, item 225; where it is inherent for IP networks to comprise IP addresses).

Regarding claim 14, Hendrickson teaches all the limitations of claim 10. Hendrickson further teaches where the RF power level is associated with a wireless telephony frequency band (column 7, lines 34-38; where “wireless devices”).

Regarding claim 19, Hendrickson teaches all the limitations of claim 15. Hendrickson further teaches of a third data comprising a time stamp that indicates a time at which the RF power level was measured at the RF power monitoring device (column 4, lines 55-64; e.g., “performance metrics...time stamp data”).

Regarding claim 20 and 25, Hendrickson teaches of a system for archiving radio frequency (RF) power levels measured at distributed locations in a network (column 15, lines 5-50; e.g., “collect data”) and power profiles (column 15, lines 5-50; e.g., “collect data to ascertain demographic profiles”), comprising: a plurality of RF power monitoring devices (column 4, lines 47-49), each configured to: measure an RF power level at a location of the device (columns 5 and 7, lines 1-6 and 61-65, respectively; where real-time data is collected at the location where the device is presently communicating), and transmit one or more packets comprising the measured RF power level and a unique

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identifier associated with the device across a network (columns 7 and 10, lines 34-38 and lines 31-43, respectively; where mobile cellular units inherently comprise a unique identifier number that is sent along with the parametric is a RF power level. Column 1, lines 45-46; e.g., "GPRS" delivers information though packet.); and an archival server configured to: receive the packets from each of the plurality of RF power monitoring devices (column 4, lines 42-46; where the data is collected from all the devices), and store the measured RF power levels and associated unique identifiers from the packets in a power history database (column 15, lines 5-50; e.g., where "profiles" correspond to "history").

Regarding claim 21, Hendrickson teaches of a radio frequency measurement collection server (columns 7 and 8, lines 53-57 and 1-6; e.g., "data gathering software 110 tracks the usage and performance of individual usage activity...to collect certain data...routed through an intermediate server. See also, column 15, lines 32-39; e.g., "transmit and receive power"), comprising: a memory (column 4, lines 43-44); and a processing (column 4, lines 43-44) configured to: receive messages transmitted from radio frequency power monitoring devices located at distributed locations in a network (column 4, lines 42-46; where the data is collected from all the devices); and store the radio frequency power measurement data and unique identifier data in the memory (column 15, lines 5-50; e.g., where data is inherently saved with the corresponding identifier), retrieving radio frequency power measurement data and unique identifier data from each of the received messages (column 15, lines 32-50 and columns 7 and 10, lines 34-38 and lines 31-43, respectively; where mobile cellular units inherently

comprise a unique identifier number that is sent along with the parametric is a RF power level), the unique identifier data being associated with the radio frequency power monitoring device at which the radio frequency power was measured (column 15, lines 32-50 and column 7, lines 34-38; where mobile cellular units inherently comprise a unique identifier number).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendrickson in view of Holsinger (Holsinger et al.; US Patent No.: 4,055,733).

Regarding claim 2, Hendrickson teaches all the limitations of claim 1.

Hendrickson does not specifically teach of power estimator comprising: a rectifier configured to rectify the received radio frequency signal; and a filter configured to pass one or more bands of frequencies, the filter comprising at least one capacitive device and a plurality of resistive devices, the plurality of resistive devices forming a voltage dividing network that supplies portions of the rectified radio frequency signal to a plurality of power level indicators.



In related art concerning line level power signal measurements, Holsinger teaches of a rectifier configured to rectify the received radio frequency signal (figure 3, item 65); and a filter configured to pass one or more bands of frequencies (figure 3, item 66), the filter comprising at least one capacitive device and a plurality of resistive devices (figure 4, items 76 and 75), the plurality of resistive devices forming a voltage dividing network that supplies portions of the rectified radio frequency signal to a plurality of power level indicators (column 3; where the indicators are represented by items 114, 95, 100, 101, 102 and 121).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine Hendrickson's power monitoring device with Holsinger's indicator circuit in order to provide different indicators representative of different power levels, as taught by Holsinger.

5. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holsinger in view of Jones (US Patent No.: 6,057,765 A).

Regarding claim 22, Holsinger teaches of a circuit for measuring frequency power levels (figures 3 and 4), comprising a rectifier configured to rectify the received radio frequency signal (figure 3, item 65); and a filter configured to pass one or more bands of frequencies (figure 3, item 66), the filter comprising at least one capacitive device and a plurality of resistive devices (figure 4, items 76 and 75), the plurality of resistive devices forming a voltage dividing network that supplies portions of the rectified radio frequency signal to a plurality of power level indicators (column 3; where the indicators are represented by items 114, 95, 100, 101, 102 and 121).

Holsinger does not specifically teach of the display device configured to indicate the power level of the received radio frequency signal the intensity display device comprises the plurality of power level indicators, each of the plurality of power level indicators indicating at least one of a high, medium, and low power level.

In related art concerning a non-linear junction detector, Jones teaches of a display device configured to indicate the power level of the received radio frequency signal (figure 3 and column 13, lines 12-30) the intensity display device comprises the plurality of power level indicators (figure 3; e.g., "green LED", "Red LED" and "Yellow LED") each of the plurality of power level indicators indicating at least one of a high, medium, and low power level (column 13, lines 12-30; where the 3 colors represent different combination of harmonics which can represent "low", "medium" and "high" power levels).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine Holsinger's power monitoring device with Jones's indicator circuit in order to provide different indicators representative of different power levels, as taught by Jones.

Regarding claims 23, Holsinger in view of Jones teaches all the limitations of claims 22. Jones further teaches where the plurality of power level indicators comprise light emitting diodes (column 13, lines 12-19; e.g. "LED bar graphs").

6. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holsinger in view of Jones and further in view of Tom (Tom, Alfred C. US Patent No.: 6,690,947 B1).

Regarding claim 24, Holsinger in view of Jones teaches all the limitations of claim 3.

Holsinger in view of Jones does not specifically teach where the display device comprises at least one of a liquid crystal display device and a video display device.

In related art concerning flexible wireless communication and cellular telephone system, Tom teaches where the display device comprises at least one of a liquid crystal display device and a video display device (column 15, lines 6-10; e.g., "LCD" and column 18, lines 50-52; where the examiner has selected LCD from the choices provided).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine Holsinger in view of Jones device combination with Tom's LCD in order to conform to devices found nowadays, as taught by Tom.

7. Claims 3-4 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendrikson in view of Jones.

Regarding claim 3, Hendrickson teaches all the limitations of claim 1.

Hendrikson does not specifically teach of a display device configured to indicate the power level of the received radio frequency signal.

In related art, concerning a non-linear junction detector, Jones teaches of a display device configured to indicate the power level of the received radio frequency signal (column 13, lines 12-30).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine Holsinger's power monitoring device with Jones's

display in order to graphically indicate the different received power levels, as taught by Jones.

Regarding claim 4, Hendrickson in view of Jones teaches all the limitations of claim 3. Jones further teaches where the display device comprises the plurality of power level indicators, each of the plurality of power level indicators indicating at least one of a high, medium, and low power level (column 13, lines 12-30; where the 3 colors represent different combination of harmonics which can represent "low", "medium" and "high" power levels).

Regarding claims 26 and 28, Hendrickson teaches of a device (column 7, lines 32-38) and method of monitoring radio frequency (RF) power at a hand-held RF power monitoring device (columns 4 and 10, lines 36-39 and 31-43), comprising: receiving RF signals to obtain received RF signals (column 3, lines 16-44; where cellular devices receive RF signals); estimating a power level associated with the frequency selected RF signals (column 10, lines 31-36 and figure 12, item 220; where if the power level is measured it is necessary to have a power measurement device or estimator; and frequency selecting the received RF signals to obtain frequency selected RF signals (column 3, lines 41-44);

Hendrickson does not specifically teach of the display device configured to indicate the power level of the received radio frequency signal the intensity display device comprises the plurality of power level indicators, each of the plurality of power level indicators indicating at least one of a high, medium, and low power level.

In related art concerning a non-linear junction detector, Jones teaches of a display device configured to indicate the power level of the received radio frequency signal (figure 3 and column 13, lines 12-30) the intensity display device comprises the plurality of power level indicators (figure 3; e.g., "green LED", "Red LED" and "Yellow LED") each of the plurality of power level indicators indicating at least one of a high, medium, and low power level (column 13, lines 12-30; where the 3 colors represent different combination of harmonics which can represent "low", "medium" and "high" power levels).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine Hendrickson's power monitoring device with Jones's indicator circuit in order to provide different indicators representative of different power levels, as taught by Jones.

Jones teaches of activating at least one of a high, medium and low RF power level indicator based on the estimated power level (column 13, lines 12-30; where the 3 colors represent different combination of harmonics which can represent "low", "medium" and "high" power levels).

Regarding claim 27, Hendrickson in view of Jones teaches all the limitations of claim 26. Jones further teaches where the display device comprises the plurality of power level indicators, each of the plurality of power level indicators indicating at least one of a high, medium, and low power level (column 13, lines 12-30; where the 3 colors represent different combination of harmonics which can represent "low", "medium" and "high" power levels).

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8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendrickson in view of Jones and further in view of Tom.

Regarding claim 6, Hendrickson in view of Jones teaches all the limitations of claim 3.

Hendrickson in view of Jones does not specifically teach where the display device comprises at least one of a liquid crystal display device and a video display device.

In related art concerning flexible wireless communication and cellular telephone system, Tom teaches where the display device comprises at least one of a liquid crystal display device and a video display device (column 15, lines 6-10; e.g., "LCD" and column 18, lines 50-52; where the examiner has selected LCD from the choices provided).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine Hendrickson in view of Jones device combination with Tom's LCD in order to conform to devices found nowadays, as taught by Tom.

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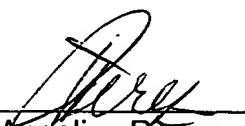
**Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 703-305-8724. The examiner can normally be reached on 7:15 a.m. - 3:55 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and for After Final communications.

Information regarding Patent Application Information Retrieval (PAIR) system can be found at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.

  
Angelica Perez  
(Examiner)

  
NAY MAUNG  
SUPERVISORY PATENT EXAMINER

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